



INTERNAL CORRESPONDENCE

METALS DIVISION

• P O BOX 579 4625 ROYAL AVE, NIAGARA FALLS, NEW YORK 14

To (Name) Dr. S. G. Austin
 Division UCC Medical Dept.
 Location 4th Floor
 270 Park Avenue
 New York, NY 10017

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 Originating Dept MINERALS TECHNOLOGY

Answering letter date

Copy to Mr. R. L. Folkman

Subject Metals Division Uranium
 Production Workers 1943-1949

The Area Plant at the Union Carbide Niagara Works was initiated by U.S. Government Construction Contract W-7405-ENG-14 with Electromet on November 14, 1942 (Exhibit I, page 137). Construction of the actual manufacturing building, Building 162, began on January 5, 1943. Contracts W-7405-ENG-227 and W-7403-ENG-255 were initiated on March 1, 1943, and production operations commenced on April 1, 1943. Uranium tetrafluoride (UF₄), produced at Linde, was converted in the Area Plant to uranium metal and recast into ingots. This metal eventually was refabricated by others into natural uranium fuel elements (slugs), clad with aluminum, and used to fuel the air cooled graphite reactor at Clinton Laboratories in Oak Ridge and the plutonium production reactors at Hanford, Washington, for which the Oak Ridge reactor was a prototype. Clinton Laboratories was originally administered by the University of Chicago and Hanford by the DuPont Corporation. DuPont personnel were trained at Oak Ridge prior to the initiation of the Hanford reactors.

The Niagara operations were contained in two buildings, the so-called Area Plant, Building 162, which was demolished in 1957, and an adjacent building, still standing, later called the maintenance building and is identified as Building 163. Maintenance department activities were conducted in Building 163 until 1974 when the maintenance department moved into a renovated basement in Building 94. Building 163 is used for storage and a chemical pilot operation on silica metal purification was conducted there in 1975. The site of the demolished Area Plant is now the location of a research building housing the bulk of alloy research laboratories and office space now identified as Building 166. Exhibit II shows the Area Plant and adjacent maintenance building in 1954.

The "construction" contract, W-7405-ENG-14, with the government was closed out on November 27, 1953. Decommissioning and decontamination were formally begun early in 1953 and the plant equipment was being dismantled in the summer of 1953 (Exhibit III, page 3). It should be stressed that contract W-7405-ENG-14 has been assumed by me to be a "construction" contract since the decontamination of the building refers to that contract. The contents of the two later contracts are not formally known but it can again be assumed that they were related to production because they were initiated one month prior to the start of production on April 1, 1943. There is no formal record at Niagara of the actual termination date of the "production" contracts.

The Area Plant buildings were considered decontaminated on November 9, 1953 (Exhibit III, page 9) and the property was released to Electromet for other uses.

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It is obvious that the date of the production cutoff is not known with any certainty. A poll of the remaining Area Plant workers gives as many cutoff dates as the people asked, indicating that personal recollections cannot be depended upon. It is known that following the uranium production cutoff date zirconium was processed in the building. One source says it was post 1946 and zirconium production occurred in 1947 and 1948 (Exhibit III, page 1). The next solid reference is the in-house publication, the TAPPING POT, which stated in April 1948 that work was difficult because the carpenters were busy in the building; then in June 1948 the plant is reported as reopening. So the only thing we can be sure of is that sometime between January 1, 1946, and April 1948, uranium production was suspended. It is probable, from personal recollections, that uranium production ceased sometime around January 1947. An absolute date on the cessation of the production contract, that is not available at Niagara, would probably pinpoint this date. It may be available from the Law Department or Corporate records.

The Area Plant, Building 162, was finally demolished and disposed of by means acceptable to the AEC in 1957 prior to the construction of Building 166. The demolition procedure was dated March 16, 1957. The attached correspondence indicates that equipment, exhaust fans, building structural members, ducts, etc., were still contaminated (Exhibit IV). It seems to be possible that between the cessation of uranium production and the demolition of the building, a moderate radioactive exposure hazard existed for the occupants of the building and much less so for adjacent areas of the plant. Many of the people in our present organization, including our Senior Vice-President, had their first offices in this building when they were young research engineers between 1947 and 1957. So much for the history of the building.

We do not have any employee records at Niagara prior to 1960. However, beginning in 1943, the in-house publication TAPPING POT contained many references to the social activities of Area Plant personnel. The correspondent for the Area Plant published a column called Area Emanations, an obvious reference to radioactive emanations and probably a breach of security which escaped the dull minds of the Army security people.

The first reference to the Area Plant in the TAPPING POT was the aforementioned news article that construction had begun on January 5, 1943. The April 1943 edition listed six members of the newly appointed Area Plant staff. The next reference is August 1943 and from then on, with occasional two-month lapses, the publication is a gossipy source of information up to and including December 1945. After VJ day, on October 2, 1945, an Army-Navy E award was presented to Electromet for its contribution to the war effort. Members of the Area Plant received certificates and pins and attended the award ceremony (Exhibit V, VI, and VII). This was reported in November 1945 and it is certain that all Area Plant workers then knew the nature of their activities and that they had been handling natural uranium with its associated then known radioactive hazards. With the war's end, interest in publishing Area Emanations ceased and there were only four brief references in 1946 and 1947 until the publication of the Plant's reopening in June 1948. After that date there was a brief flurry of Area Emanations activity. In 1946 and 1947 the TAPPING POT only contributed a score of new names to the Area Plant cast of characters. We have examined all the TAPPING POTS in this period and hereby transmit to you the list of employees mentioned as workers in the Area Plant with a reference to the first date their names are mentioned.

May 20, 1981

This is the best that we can do at the local level. There are 162 employees listed prior to January 1, 1946, and 31 additional employees prior to September 1949, when the publications essentially stopped, for a total of 193 employees.

My inquiries to former Area Plant employees in the past month have positively proven the fact that you can't trust anyone's memory for facts and dates over thirty years ago.


R. J. Klotzbach

RJK:cjb
Attachments

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